

Assembly Manual



What's In The Box

Please inspect the contents of your shipped package to ensure you have received everything that is listed below.



Jib Sections



Jib Sections



Big Heavy Duty
Stand (HD-STD-B)



Cable Guide
Support Rods

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2 x Weight rods



3 x Weight Closers



Tool Pouch



3 x Ratchet knobs & Stoppers



2 x Spanners - 19 & 13



2 x Hooks



14 x Velcro



Wire Holder



Wire Tensioner Hook



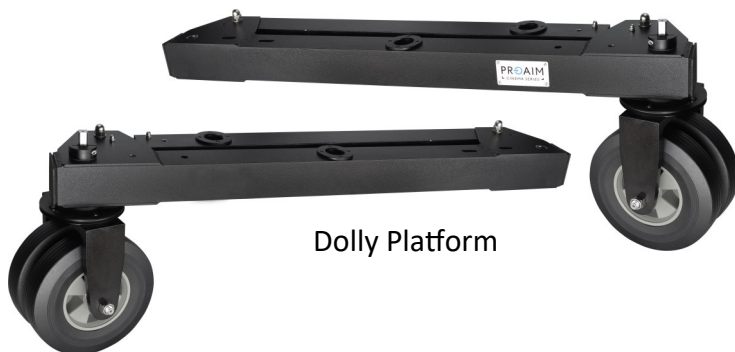
Red Cables: 5



Yellow Cable : 1



Blue Cables: 6



Dolly Platform



2 x Pneumatic Wheels



Dolly Handle/Steering



Cloth



2 x Spanners - 17mm & 10mm
1 x 4mm T-Type Allen key



Bag packing



Head Platform



Central Fork



Spin-3 Pan-tilt Head



Joystick Controller
with Cap & Handle



15mtr Control



3mtr XLR
Cable



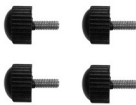
12V AC Adapter



Pan Tilt Mounting
Plate and knob



Camera Plate



4 x Knobs



2 x 2A Fuse



1/4" Check nut



Universal
Adapter



1.5mm L-Type extra
Long Allen Key



T-Type Allen Keys
5mm, 4mm, 3mm



Joystick Controller
Plate

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Safety Hints

ATTENTION: PLEASE READ THIS BEFORE USING THE CRANE TO PREVENT DAMAGE!

Assembly Caution:

Be attentive when assembling Dolly, Tripod & Crane to prevent equipment damage. Avoid assembly under the influence of alcohol or drugs.

Watch Your Hands:

Operate cautiously to avoid pinching hands or fingers between arms. Ensure secure connection of all Crane sections.

Stability Check:

Operate the Crane only on a leveled, stable surface. Connect steel cables for stabilization without hindering Crane movements.

Weather Awareness:

Exercise caution when operating in bad weather. Protect the pan-tilt/gimbal head and control bar from rain to prevent damage.

Safety Precautions:

Avoid operation near high-voltage power cables. Keep the Crane's surroundings clear and establish the correct weight balance before telescoping.

Battery Maintenance:

Monitor battery levels to prevent functional issues. Fold the Crane for longer transfers and use locking pins for stability when adjusting height.

Technical Support:

For further assistance or queries, contact our sales representative for online technical support. Operating the Crane safely ensures better shots and smooth operation.

FOLLOWING THESE GUIDELINES WILL PROVIDE BETTER SHOTS AND TROUBLE-FREE OPERATION.

IF YOU NEED ADDITIONAL INFORMATION, YOU CAN AVAIL TECHNICAL ASSISTANCE 'ONLINE' BY CONTACTING OUR SALES REPRESENTATIVE.

Big Heavy Duty Dolly (HDD-B) Assembly

NOTE: To ensure safe assembly of the crane and enhance its stability, please attach the supporting feet to the dolly during assembly to prevent any potential accidents.

Dolly Platform Assembly

- Carefully open the leg of HDD-B Dolly.



- Similarly, open the other two legs.



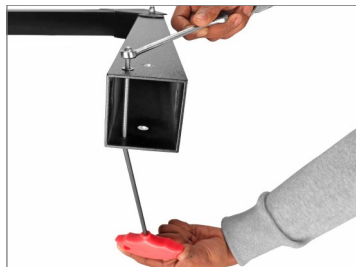
- Loosen and remove the Long bolt, washer and Nut bolt using the 10mm Allen key and 19mm spanner.



- Repeat the same process to remove the Long bolt, washer and nut bolt from the other wheels.



- Now, loosen and remove the bolt and nut bolt from the Dolly leg using the 3/16" Allen key and 100mm spanner.



- Insert one end of the Dolly Platform into the other platform end.



- Re-Insert the bolt and nut bolt.



- Re-tighten the bolt and nut bolt using the 3/16" Allen key and 10mm spanner.



- Insert the long bolt and nut bolt.



- Re-tighten the long bolt and the nut bolt using a 10mm Allen key and 19mm spanner.



- Insert the bolt and nut bolt into the other end of the Dolly platform.



- Re-tighten the bolt and nut bolt using a 3/16" Allen key and 10mm spanner.



Pneumatic wheels Assembly

- Loosen the bolt of the pneumatic wheel's wheel stopper using a 3/16" Allen key and remove both the wheel stoppers and washers from it.



- Similarly, remove the wheel stopper and washer from the second wheel.



- Remove the cap from the Dolly platform and then insert the dolly leg into the Dolly platform.



- Now, insert the plastic washer and the wheel stopper, as shown in the image.



- After fully inserting the dolly leg, insert the plastic washer from the top followed by the wheel stopper.

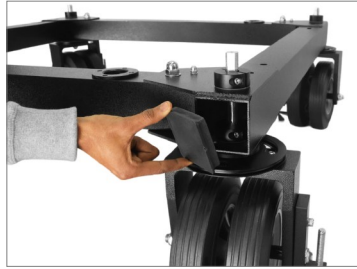


- Re-tighten both the wheel stoppers using a 3/16" Allen key.

NOTE: To tighten the internal wheel stopper, push the stopper downwards.



- Now, insert the cap after securely tightening the wheel stopper.
- Repeat the same process to attach the remaining wheels.

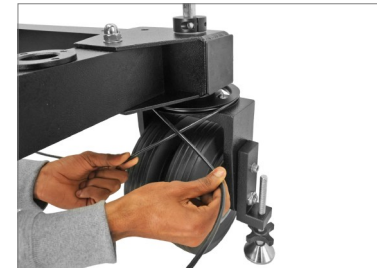


- Loosen the knob of the Silver feet and slide the silver feet downwards to attach them to the surface.
- Then, tighten the knob and lock the wheel securely.
- Repeat the same process to lock the remaining wheels.



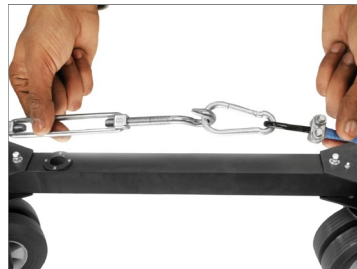
Connecting Cable Mounting

- Wrap the connecting cable around all the four-floor wheels.



- After securely wrapping the cable, attach the cable's turnbuckle to the hook.

NOTE: Loosen or tighten the turnbuckle accordingly to attach both cable ends.



Cloth Assembly

- Attach the cloth to the Dolly.
- Now, fasten all the Velcro straps with the buckles and secure them.



Steering /Handle Assembly

- Mount the handle on the Dolly's corner and tighten its bolt using the 6mm Allen key.



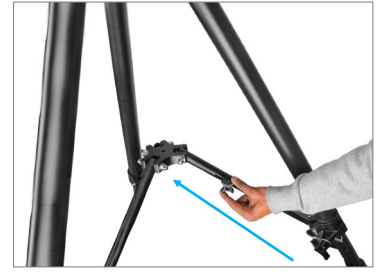
- The handle is now securely attached to the dolly.

NOTE: The handle can be attached to any corner of the dolly whichever feels convenient.



Big Heavy Duty Stand (HD-STD-B) Mounting

- Open the safety belt of the HD-STD-B stand.
- Stretch the stand legs and carefully open the stand.
- Loosen both knobs to extend the length of the stand leg.



- Repeat the same process to extend the length of other legs.
- Then, secure them using the locking pin and re-tighten the knob.

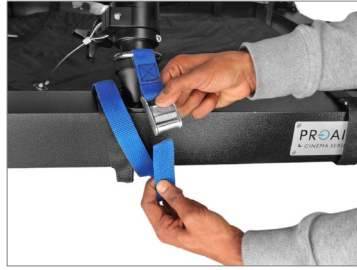


- Now mount the stand on the Dolly.

NOTE: You can extend the height of the stand as per your requirement.



- To secure the stand, wrap the safety belts to the Dolly and insert them into the buckles.

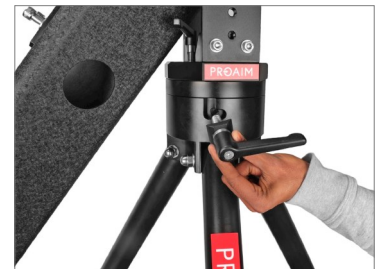


Jib Sections Assembly

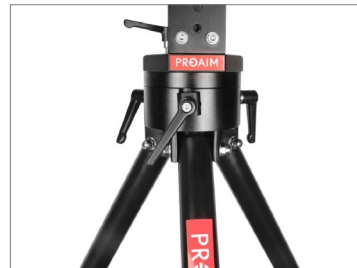
- Mount Jib Section 3 on the HD-STD-B stand.



- Insert the stopper into the Ratchet knob.
- Then insert the knob into the stand's hole ensuring the hole alignment.



- Using the same process, insert the remaining Ratchet knobs and tighten all the knobs to secure the Jib.



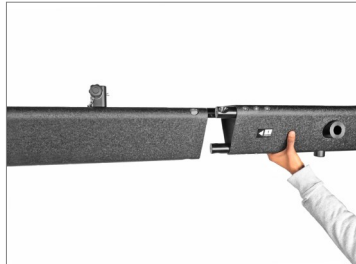
- Remove all the bolts and washers from the Jib Section 2.



- Now, insert Jib Section 2 into Jib Section 3 and insert all the bolts and washers.

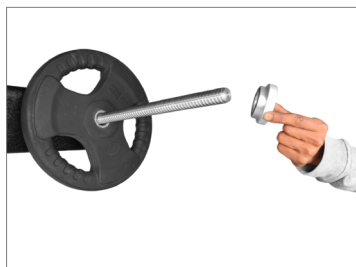


- Tighten all the bolts and washers using the 19mm spanner.
- Jib Section 2 has been securely attached to Jib Section 3.
- Repeat the same process to attach Jib Section 1 with Jib Section 2.
- Repeat the same process to attach Jib Section 3 with Jib Section 2.



Weight Rod & Weight Mounting

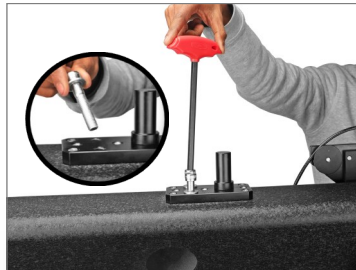
- Insert the weight rod (Not included) and put the weight (Not Included) on it.
- Insert the weight stopper to secure the weights.
- Put weights on the other side of the weight rod using the same process.
- Now securely insert Jib Section 13 into Jib Section 12.



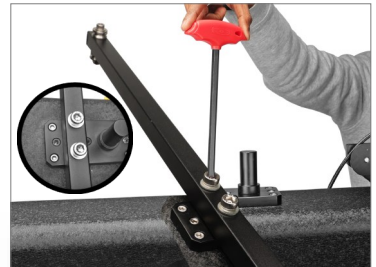
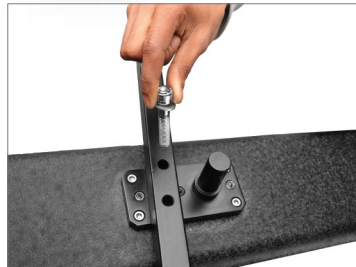


Cable Guide Support Rods Mounting

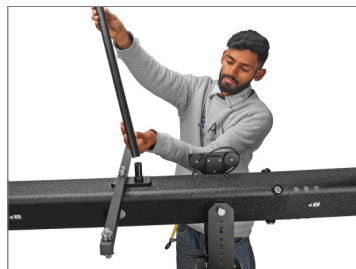
- Loosen and remove both bolts using the 5/16" Allen Key.
- Mount the large cable guide support on the Jib section.



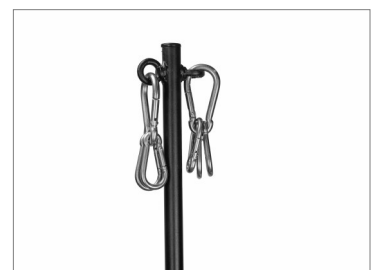
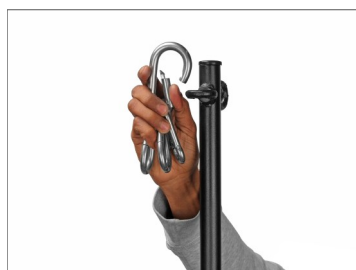
- Align the Jib section holes with the holes of the cable guide support rod and insert the bolts.
- Tighten the bolts using the 5/16" Allen key.



- Now, mount the other piece of cable guide support rod.



- Mount the hooks on the cable guide support rod.



Wire Holder Mounting

- Insert the wire holder into Jib Section 8 and securely lock it.



Attaching the Yellow Stability Cables

- Attach 1st end of the yellow cable with Jib Section 3's yellow cable and insert the cable into the cable holder.



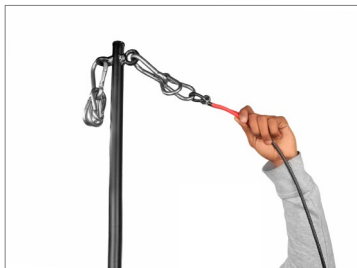
- Attach Cable's 2nd end with Head Platform's yellow cable.

NOTE: If the length of the wire is short, loosen the hook to increase its size.



Attaching the Red Stability Cables

- Insert one end of the short Red cable into the hook of the cable guide rod, then attach the other end of the cable to the clamp of Jib Section 1.



- Red wire is securely connected to Jib Section 1.
- Follow the same procedure for the other short red wires as shown in the image.



- Insert two cables into the hook of the cable guide rod.
- Now, attach the first end of the 1st cable to the clamp of Jib Section 5 and first end of 2nd cable to the clamp of Jib Section 7.



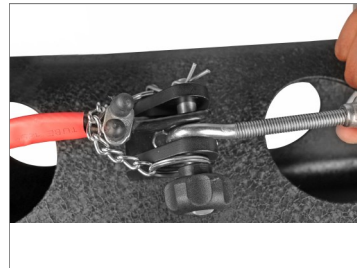
- Insert one end of the 3rd Red cable into the hook of the cable guide rod, and mount the cable onto the smaller cable guide support rod.



- Now, attach the other end of the 3rd Red cable to the clamp of Section 11.



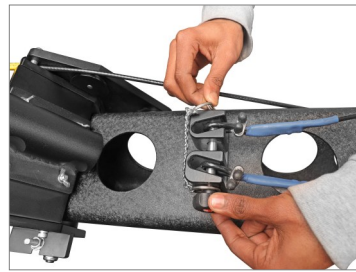
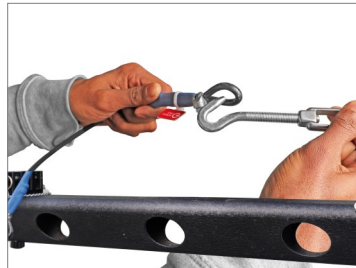
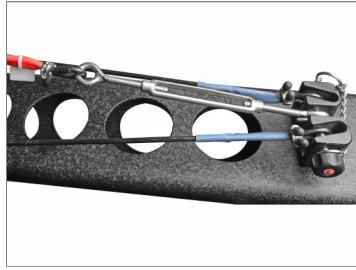
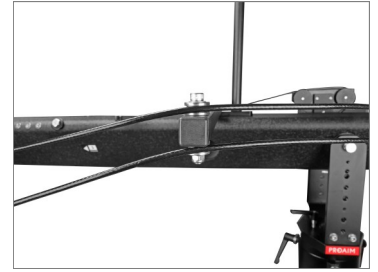
- Attach one end of Red cable to the clamp of Jib Section 7 and other end of the cable to the clamp of Jib Section 13.



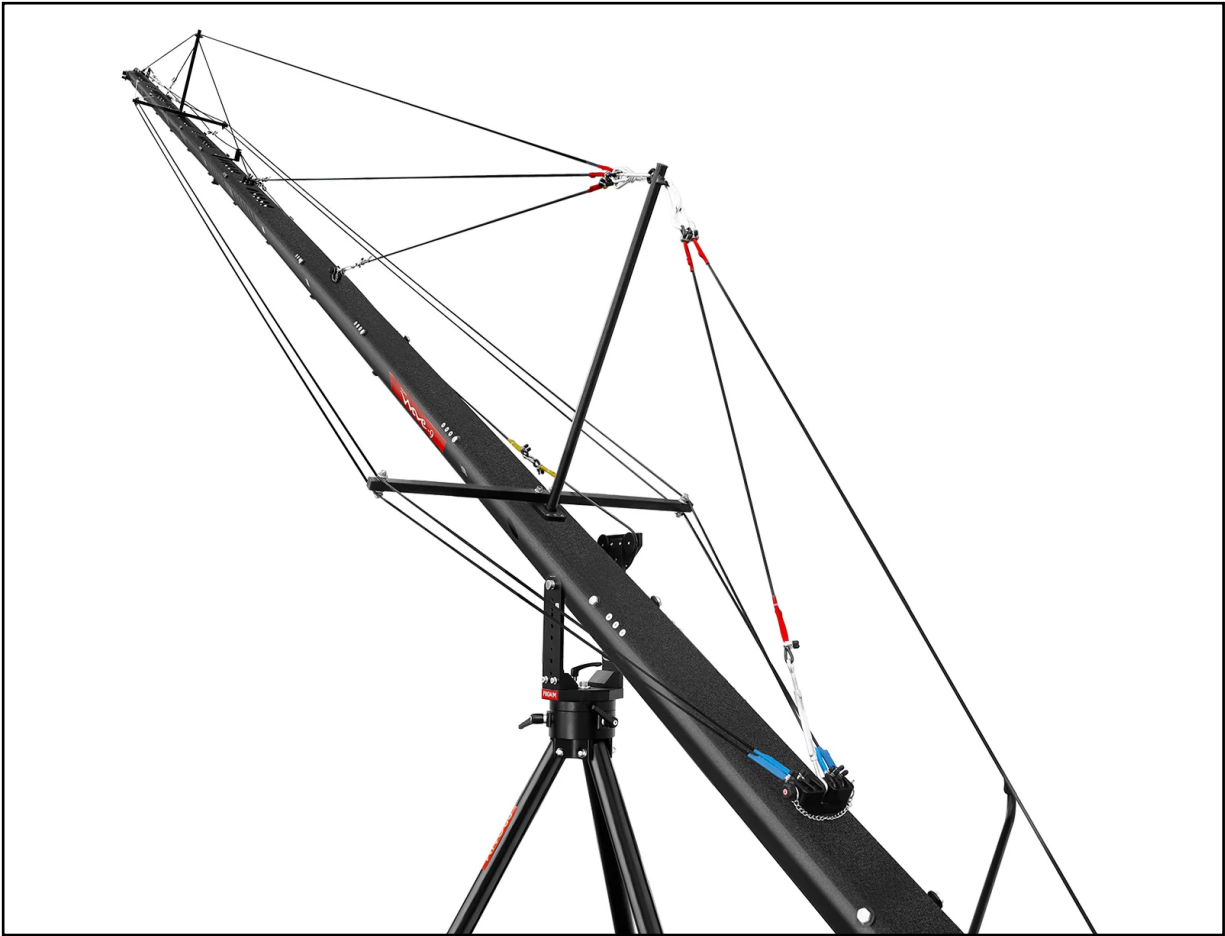
Attaching the Blue Stability Cables

- Insert four cables to the clamp of Jib Section 1.
- Align the cables to the cable guide from the side and adjust the cable using the wire tensioner. Similarly, apply to the other side of the jib.
- Attach two cables to the clamp of Jib Section 11.
- After attaching the blue wire, lock the wire securely with a safety pin.
- Hook one meter blue cable to the remaining long blue cable and hook it to the clamp of Jib Section 13.
- Now, secure the wire using the locking knob.
- Similarly, attach the other hook joint to the other blue cable and secure the wire.

NOTE: If the length of the wire is short, loosen the hook to extend its length.



Wire System Adds Rigidity & Reduces Vibration During Movement



Spin-3 Axis Pan-Tilt Head Mounting

- Insert Spin-3 Pan-Tilt head in the Pan-Tilt mounting plate and then insert the knob.



- Spin-3 Pan-Tilt head is now securely mounted to jib.



- Loosen the bolt of the Spin-3 Pan-Tilt head using the 4mm Allen key and detach the motor gear.

- Adjust Spin-3 Pan-Tilt head and balance it.

NOTE: Make sure to detach the motor before balancing the Pan-Tilt.



- Loosen the bolt using a 4mm Allen key and adjust the camera mounting plate.

FEATURE: The 3-Axis Spin-3 pan-tilt head ensures a perfect camera balance and offers smooth camerawork at all times.



- After adjusting the camera plate, re-tighten the bolt using a 4mm Allen key.



- Mount the Camera (Not included) on the camera plate and insert the camera bolt.

NOTE: The universal camera plate is adjustable for different sized setups.



- Tighten the camera bolt using a 3/16" Allen key.

NOTE: The Head will pan tilt and roll through 360°, and this enables the camera to point directly upwards or downwards when required.



Cable & XLR Cable Assembly

- Connect the female end of the Spin-3 Pan-Tilt with the male end of the XLR cable.
- Connect cable's female end with the Spin-3 Joystick controller.
- Connect AC Adapter's female end with the Spin-3 Joystick controller.



AC Adapter & Universal Adapter Assembly

CAUTION: Always use a regulated power supply.

- Unregulated power supplies can provide inconsistent voltage, potentially damaging your equipment.
- Choose a power supply with an output voltage less than 24 volts.
- Using a higher voltage can cause permanent damage.

- Connect one end of the power cable with the adapter.



- Connect second end of the power cable with the Universal adapter.



- **Speed Controller**

The Speed Controller adjusts the speed of pan tilt & Dutch roll based on the requirement of the shot.

- **Dead Spot**

The dead spot prevents the head from stopping suddenly with a jerk.

- **Damping Control**

Damping control prevents the Head from stopping with a jerk enabling you to achieve smooth endings.

- **Pan-Tilt Roll Direction**

You can reverse the panning & tilting direction as & when required.



Parts of Spin-3 Axis Joystick Controller



Joystick Controller Mounting

- Remove the cap of the Joystick controller and insert the handle into the controller.



- Loosen the knob of the Joystick controller and slide the controller onto the weight rod.

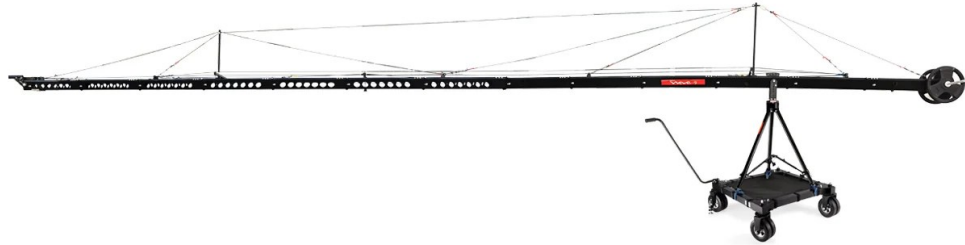


- After sliding the controller, tighten the controller knob to secure it.



Fits Different Shooting Lengths 40ft, 34ft, 22ft, 16ft

40ft →



34ft →



22ft →



16ft →



Balancing Points

Follow these steps to Balance the Pan Tilt Head

- Turn the unit on and move the tilt control until the camera plate is vertical.
- Loosen the two screws holding the tilt motor.
- Grasp the motor and turn slightly to disengage the gears.
- Mount the camera to the camera plate with the screw provided.
- Tighten it by securely threading the nut to the bottom of the camera plate.
- Ensure your balance point, previously marked with chalk or tape, is in the middle of the plate.
- Loosen the knob below the camera plate and slide the camera and plate up or down until the center line of your camera is about in the middle of the large gear.
- Now tighten the knob.
- If the camera is perfectly balanced, it stays in any position while motor gear remains unattached.
- Grasp the motor and turn it back until the gears mesh.
- Gently tighten motor screws.
- Secure the camera.

NOTE: All reduction boxes have a small amount of backlash. Balancing the camera will reduce the backlash to a minimum, making it feel at the top of the tilt.

Balancing Tips

Self Balance			
Length	40ft	34ft	22ft
Weight	141kg	93kg	22kg
Counter Balance			
Camera Weight	40ft	34ft	22ft
1kg	5kg	4kg	2kg
2kg	10kg	8kg	4.2kg
3kg	15kg	12kg	6.4kg
4kg	20kg	16kg	8.6kg
5kg	25kg	20kg	10.8kg

Operation

- With the camera set up as described above, Power ON by pressing the RED Switch on the top of the Joystick control box.
- For inverted use, disconnect the leads to the motors, rotate the control box 180 degrees, and re-install.

NOTE: Remember, practice makes perfect, and always watch the cables for binding.

JOYSTICK

The joystick is a three-axis variable speed servo controller. The further you move in one direction, the faster the output to that motor. This will be tricky initially, but a little practice will improve your success.

The joystick may be operated handheld, from a flat surface such as a tabletop, or attached to the boom arm of the Jib.

NOTE: After plugging the power cord into a proper outlet, press "power on." The LED light on the control box should illuminate, and the head may jump slightly on start-up or shut down. This is normal and can be controlled by Dead Spot. Adjust the joystick to ensure correct head movement. If necessary, reconnect the motors.

POWER CONTROL

To the right and above the joystick is a knob labeled "SPEED."

This is the power control knob. Turning to the right will be full power, and returning to the left will decrease the available power to both pan and tilt operations. The advantage of power control is that it can limit power when only slow, accurate movements are needed. With the power control at half power (approx. 8 volts max. output), the full range of motion on the joystick will be between 0 and 8 volts, making finer adjustments possible. The power control will be usable between a range of approximately 4 volts to 12 volts.

DEAD SPOT

The knob to the left is marked Dead Spot. Turning to the left (counterclockwise) will create the smallest dead spot, which means that the head will begin to move as soon as the slightest deflection of the joystick is made. Moving to the right will increase the area where no power is sent to head motors. At halfway, the dead spot will close again; this helps to avoid crossing the tilt when only pan movement is desired.

The dead spot is so tight that when the control knob is to the left, it may be necessary to back it off slightly until no movement is seen in either axis.

NOTE: With the dead spot left, the head may move in both axes on its own. The dead spot should be set at approximately 9 to ensure no unwanted movement occurs.

Linear or Logarithmic taper joystick control

All joysticks are linear, meaning each degree of the stick's movement correlates to the output. Half deflection of the joystick on the 12-volt PROAIM PAN TILT HEAD means approximately 6 volts are sent to the motors. But with the advent of digital technology, we can now control the taper of the joystick, making it logarithmic as well. Logarithmic taper means that the first joystick movement only sends a small amount of power to the motors, and the last of the deflection will send more power per degree of deflection. On Logarithmic taper, 1/3 of joystick deflection might yield 2 volts output; the next 1/3 will yield 4 volts output, and the last 1/3 yields 6 volts for a max. Again of 12 volts. This mode gives the operator fine slow movements yet retains the ability to go to the max. Speed if necessary.

TILT DIRECTION SWITCH

The Pan-Tilt can be mounted either vertically or underslung on a jib. Changing its position from vertical to underslung or vice versa requires reversing the direction as well. We can immediately reverse the direction by switching “on” the tilt direction switch.

PAN DIRECTION SWITCH

The Pan Tilt can be mounted either vertically or underslung on a jib. Changing its position from vertical to underslung or vice versa requires reversing the direction as well. By switching “on” the pan direction switch, we can immediately reverse the direction.

Counterweights

The Jib is set up with “plate weights” or barbell” style weights. Plate weights come in several weights and diameters. They get smaller as the weights get lighter. The largest (25lbs) is about 11 inches in diameter. The mounting hole is 1” in diameter for all weights. The Jib has a varying weight ratio depending on your chosen length. The 24.5ft arm itself balances at about 121.5 lbs. Just multiply the weight of the additional items you will put on the end of the arm by 5, and you will know how much weight to buy. Buy a few extras if you need to add other accessories. The lighter weights will allow you to “fine-tune” once you’re ready to go.

**YOUR PROAIM 40FT JUMBO FILM PRODUCTION PACKAGE
ALL DRESSED UP AND READY TO GO!**



(SHOWN WITH OPTIONAL ACCESSORIES)

Warranty: We offer a one-year warranty for our products from the date of purchase. Within this period, we will repair it without charge for labor or parts. The warranty doesn't cover transportation costs, nor does it cover a product subjected to misuse or accidental damage. Warranty repairs are subject to inspection and evaluation by us.

Liability: We are not liable for damage caused by products we do not supply or from mishandling in transit, accident, misuse, neglect, or lack of care of the product or service by anyone other than our company.

Contact us: If you are dissatisfied, please contact us immediately. We promise our utmost support and care until you use our product.